

THE
WATERWAYS
NETWORK

Submission: Birrarung (Yarra River) Flows Study Review

To: Environmental Flow Technical Panel and Melbourne Water project team

Date: 28 July 2026

Confidential treatment: has not been requested

Summary: We ask that the review considers Birrarung flows within the framework of the living entity thinking.

Supporting documents: The 2018 Flows Study Review, the 2017 Yarra River Environmental Water Management Plan (EWMP), and the Central and Gippsland Region Sustainable Water Strategy (CGRSWS), State of the Birrarung (Yarra) report, State of the Victorian Environment, Long Term Water Assessment for Southern Victoria, Index of Healthy Stream Condition. Melbourne Water Annual Report 2024-25. Yarra 50 Year Community Vision (All available online.)

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About The Waterways Network (TWN)

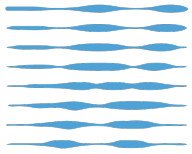
The Waterways Network is a community practice that considers how flows, rivulets, creeks, streams, and rivers form a connected network across the landscape of Australia that is fundamental to the health of our environment. The ecological integrity of the landscape is indispensable to the health of the world in which we live, and water is the critical ingredient in that integrity. The TWN is committed to understanding water as landscape flows in an Australia-wide context in all its variability and through the similarities and differences between basins, climatic zones, and jurisdictions. waterwaysnetwork.com.au

Endorsements

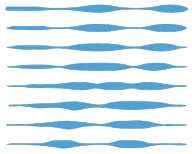
The TWN endorses the submission by the Concerned Waterways Alliance. Our submission complements the detail provided in the Alliance's submission.

Key considerations

1. The living entity thinking began on the Birrarung with Wurundjeri advocacy during the development of the Yarra River Protection Act.
2. CRGSWS (2022) acknowledges Birraung as a 'living entity' (p 124), as 'one living and integrated entity' (p181) and waters as 'sacred living entities' (p 11).
3. 'The Yarra 50 Year Community Vision states: 'Our Yarra River, Birrarung is respected as a sacred natural living entity and everyone takes responsibility for its care. Its health and integrity are paramount and uncompromised. What is good for the Yarra is good for all.'
4. Burndap Birrarung burndap umarko states in its preface (and elsewhere including the ministerial foreword) that the purpose of the plan to 'protect and enhance the Yarra River and its land as one living and integrated natural entity'.
5. The living entity thinking is an important and necessary framing for the flows study of Birrarung.
6. The living entity framing considers Birrarung as an integrated and connected living whole that is more than the sum of her parts.

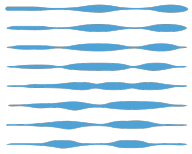


7. Flow is the first ingredient for the life of a river.
8. Birrarung is not just the main stem but also an integrated and connected catchment of tributaries.
9. A careful assessment of flows of the tributaries, and impediments to those flows and how those tributary flows contribute to the flow of the main stem strengthens the submission. A budget of contribution from tributaries, overland flows and groundwater assists in a better understanding of Birrarung flows and how that connects or does not connect with the environmental flows commitments.
10. Integrated and connected thinking emphasises the relationship between bed, bank and channel, riparian zone, groundwater and the wetlands of Birrarung, and considers cumulative impacts in space and over time (seasonal and diurnal) of extractions of flows from Birrarung.
11. Birrarung requires an estimated additional 34 GL a year to be considered a healthy living river according to the Central and Gippsland Region Sustainable Water Strategy. Policy 8-7 commits to 11 GL a year in addition to the current 17 GL bring the total to 29GL, still not sufficient. This was not delivered in 2024 or 2025 according to DEECA progress reports – ‘Not yet started’.
12. The 34 GL are likely an under estimate.
13. ‘Environmental Flow Study Review for the Yarra River’ (2018) states: ‘If it is assumed that the EE is not required to deliver low flow recommendations (i.e. passing flow requirements), then an increase in the EE from 17 GL to 40-50 GL/annum is required to meet all flow recommendations’ (p 24).
14. The flows study needs to identify the impact on the health of Birrarung of the failure to deliver the additional flows to the river, and how much can be delivered of each flow recommendation under the current 11 GL and how much could be delivered under the projected 29 GL. This modelling must include climate change reductions in flows, referenced in the ‘Long Term Water Assessment for Southern Victoria’.
15. ‘Melbourne Water Annual Report 2024-25’ states ‘This year, we have continued to participate in actions to secure more water for the environment.’ We thank Melbourne Water for that commitment but also note that no further flows have yet to be secured for Birrarung as noted in



the DEECA progress reports 2024 and 2025. The review is strengthened by a consideration of commitments as yet to be kept.

16. A robust study highlights the need for the recovery of environmental water as committed to by the current government in the CGRSWS and highlighted in MW's latest annual report and the lack of action and the impact this lack of action is having on Birrarung's health.
17. We ask that the study is put in the context of the State of the Yarra report and the Healthy Waterways Strategy, the Victorian State of the Environment report and the Long-Term Water Resource Assessment for Southern Victoria and the most recent Index of Stream Conditions for Victoria.
18. A robust review would document the inundation requirements for Birrarung wetlands, including the need for periods of wet and periods of dry
19. The excellent 'Environmental Flow Study Review for the Yarra River' (2018) establishes a strong baseline for longitudinal comparison of changes in both flows and policy, and policy gaps over time. Were the objectives of that review met?
20. As acknowledged our collective understanding of environmental flows has increased since 2018 and we ask that the flows review identifies how this increased knowledge determines our understanding of what flows are needed for Birrarung and when those flows need to be released.
21. The Yarra Birrarung work is already currently underfunded to achieve the commitments made by government in the Birrarung Act and under 'Burndap Birrarung burndap umarko (Yarra Strategic Plan)'. This lack of funding impacts on the values of environmental flows. We ask this be noted in the review.
22. 'Environmental Flow Study Review for the Yarra River' (2018) states 'Environmental flows alone are often not sufficient to achieve desirable ecological outcomes other actions are often required in order for objectives to be achieved.'
23. Other actions should be considered as complementary not as substitute for environmental flows. They enhance but do not replace.
24. Birrarung and other southern waterways of Victoria are drying, as the 'Long-Term Water Resource Assessment for Southern Victoria' states,



which includes the waters of the waterways in the Melbourne Water area of responsibility. The latest 'Index of Stream Conditions for Victoria' tells a similar story of waterway health on a broader set of indicators.

25. The 'Healthy Waterways Strategy 2023' clearly identifies the decline in the health of waterways in the region of Melbourne Water's responsibility; this contrasts with the intent of the strategy's intent to improve the health of waterways. The flows review needs to identify the contribution of a lack of adequate (and promised) flow to this decline in the health of the Birrarung.
26. The Victorian State of the Environment report shows 35% of indicators declining and a mere 19% improving. As the state with the most cleared land in Australia, the baseline of the health of Victoria's environment begins at an initial low starting point. In the indicators of biodiversity only 1 out of 11 was assessed as good. And out of the 22 trend assessments that had sufficient data to be assessed 20 were deteriorating and only 2 were improving. Adequate waterway flows are critical for environmental health. Birrarung flows should be put in the context of the environmental health of the Victoria in the review.
27. Flows, water and waterways are fundamental to the survival of threatened species and good populations of common species. It is the principal ingredient for reversing decline. The spacing of healthy wetlands support by adequate flows is a consideration in flows to support migration between to respond to seasons and to a drying climate. The flows to wetlands need to integrate into assessing the flows of a healthy river in terms of the spacing of those wetlands allowing adequate connectivity for migration of birds, insects and amphibians.
28. The North-east Link is predicted to reduce flows in some 70 years time in the river and the Bolin Bolin billabong and we ask that the flows review take a long-term and holistic view of Birrarung's flow needs.
29. The community has concerns that a flow review might seek to cap or reduce already clearly identified flow requirements from earlier strategies and government reviews. Environmental enhancements are no substitute for flows. Birrarung desperately needs additional committed flows.
30. TWN looks forward to the release of the draft review and of providing support to the review as it progresses.

Conclusion

Flows are fundamental to the health of Birrarung and the flows review benefits from the application of the living entity framework consistent with other policy and legislation for Birrarung. The living entity thinking is now an established part of government policies and strategies and we ask that the flows review integrates the thinking into its review. The current flows are inadequate to maintain the health of the Birrarung as has been established by other studies and reviews. A further 11 GL has been promised of the estimated needed total minimum of 34 GL. Yet this has not been delivered. The flows review will benefit from detailing the impact of the gap between the promised delivery and also the needed total reach by reach.

Andrew Kelly, Convenor